

CLAIMS

What is claimed is:

- 5 1. A method for generating node configuration data, comprising:
forming a service level agreement template, said forming
including
determining a plurality of traffic classes,
determining at least one required input for a first
10 graphical user interface, and
determining at least one required input for a second
graphical user interface;
obtaining service level agreement constraints for at least
one service level agreement, said obtaining including
5 generating said first graphical user interface,
obtaining, through said first graphical user interface,
indication of a selected one of said plurality of traffic
classes,
obtaining, through said first graphical user interface,
20 at least one value associated with said at least one
required input for said first graphical user interface,
generating said second graphical user interface, and
obtaining, through said second graphical user
interface, at least one value associated with said at least
25 one required input for said second graphical user interface;
and
generating, responsive to said selected one of said
plurality of traffic classes, said at least one value associated
with said at least one required input for said first graphical
30 user interface, and said at least one value associated with said
at least one required input for said second graphical user
interface, node configuration data, said node configuration data
describing how at least one resource in at least one networking

device is to be configured to support at least one network service described by said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface.

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2. The method of claim 1, further comprising:

determining at least one default equation associated with said first graphical user interface;

10 applying said default equation to said at least one value associated with said at least one required input for said first graphical user interface to generate a first set of outputs; and

wherein said generating said node configuration data is further responsive to said first set of outputs.

15 3. The method of claim 1, said forming said service level agreement template further comprising:

determining at least one optional input for said first graphical user interface;

20 determining at least one format of at least one screen display in said first graphical user interface, wherein said at least one screen format includes a first field associated with said required input for said first graphical user interface and a second field associated with said optional input for said second graphical user interface; and

25 wherein said generating said first graphical user interface includes displaying said at least one screen display.

30 4. The method of claim 2, wherein said at least one default equation comprises program code.

5. The method of claim 1, wherein said determining said at least one required input for said second graphical user interface further comprises determining required information describing at

least one resource associated with at least one networking device, wherein said required information associated with said at least one resource describes, at least in part, a virtual private network.

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6. The method of claim 5, wherein said required information describing said at least one resource comprises a virtual network identifier.

10 7. The method of claim 5, wherein said required information describing said at least one resource comprises an indication of whether connectivity is required between said at least one networking device and a second networking device.

15 8. The method of claim 1, wherein said forming said service level agreement template further includes:

determining at least one optional input for said second graphical user interface,

20 determining at least one format of at least one screen display in said second graphical user interface, wherein said at least one screen format includes a first field associated with said required input for said second graphical user interface and a second field associated with said at least one optional input for said second graphical user interface; and

25 wherein said generating said second graphical user interface includes displaying said at least one screen display in said second graphical user interface responsive to said at least one format.

30 9. The method of claim 1, wherein said forming a service level agreement template comprises receiving at least one input through a third graphical user interface.

10. A system for generating node configuration data, comprising:
at least one memory for storing program code;
at least one processor, communicably coupled to said memory,
said at least one processor operable to execute program code
5 stored in said memory;

program code, stored in said memory, for forming a service
level agreement template, said program code for forming said
service level agreement template including

10 program code for determining a plurality of traffic
classes,

program code for determining at least one required
input for a first graphical user interface, and

program code for determining at least one required
input for a second graphical user interface;

15 program code, stored in said memory, for obtaining service
level agreement constraints for at least one service level
agreement, said program code for obtaining including said service
level agreement constraints including

20 program code for generating said first graphical user
interface,

program code for obtaining, through said first
graphical user interface, indication of a selected one of
said plurality of traffic classes,

25 program code for obtaining, through said first
graphical user interface, at least one value associated with
said at least one required input for said first graphical
user interface,

program code for generating said second graphical user
interface, and

30 program code for obtaining, through said second
graphical user interface, at least one value associated with
said at least one required input for said second graphical
user interface; and

program code, stored in said memory, for generating, responsive to said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface, and said at least one value associated with said at least one required input for said second graphical user interface, node configuration data, said node configuration data describing how at least one resource in at least one networking device is to be configured to support at least one network service described by said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface.

11. The system of claim 10, further comprising:

program code for determining at least one default equation associated with said first graphical user interface;

program code for applying said default equation to said at least one value associated with said at least one required input for said first graphical user interface to generate a first set of outputs; and

wherein said program code for generating said node configuration data is further responsive to said first set of outputs.

12. The system of claim 10, said program code for forming said service level agreement template further comprising:

program code for determining at least one optional input for said first graphical user interface;

program code for determining at least one format of at least one screen display in said first graphical user interface, wherein said at least one screen format includes a first field associated with said required input for said first graphical user interface

and a second field associated with said optional input for said second graphical user interface; and

wherein said program code for generating said first graphical user interface includes program code for displaying said
5 at least one screen display.

13. The system of claim 11, wherein said at least one default equation comprises program code.

10 14. The system of claim 10, wherein said program code for determining said at least one required input for said second graphical user interface further comprises program code for determining required information describing at least one resource associated with at least one networking device, wherein said
15 required information associated with said at least one resource describes, at least in part, a virtual private network.

15. The system of claim 14, wherein said required information describing said at least one resource comprises a virtual network
20 identifier.

16. The system of claim 14, wherein said required information describing said at least one resource comprises an indication of whether connectivity is required between said at least one
25 networking device and a second networking device.

17. The system of claim 10, said program code for forming said service level agreement template further comprising:

program code for determining at least one optional input for
30 said second graphical user interface;

program code for determining at least one format of at least one screen display in said second graphical user interface, wherein said at least one screen format includes a first field

associated with said required input for said second graphical user interface and a second field associated with said at least one optional input for said second graphical user interface; and

wherein said program code for generating said second graphical user interface includes program code for displaying said at least one screen display in said second graphical user interface responsive to said at least one format.

18. The system of claim 10, wherein said program code for forming a service level agreement template comprises program code for receiving at least one input through a third graphical user interface.

19. A system for generating node configuration data, comprising:
means for forming a service level agreement template, said program code for forming said service level agreement template including

means for determining a plurality of traffic classes,

means for determining at least one required input for a first graphical user interface, and

means for determining at least one required input for a second graphical user interface;

means for obtaining service level agreement constraints for at least one service level agreement, said means for obtaining including said service level agreement constraints including

means for generating said first graphical user interface,

means for obtaining, through said first graphical user interface, indication of a selected one of said plurality of traffic classes,

means for obtaining, through said first graphical user interface, at least one value associated with said at least one required input for said first graphical user interface,

means for generating said second graphical user interface, and

means for obtaining, through said second graphical user interface, at least one value associated with said at least one required input for said second graphical user interface; and

means for generating, responsive to said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface, and said at least one value associated with said at least one required input for said second graphical user interface, node configuration data, said node configuration data describing how at least one resource in at least one networking device is to be configured to support at least one network service described by said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface.